

What is claimed is:

1. An improved detergent dispenser for a clothes washing machine having a tub for holding clothes to be washed, comprising:  
a base mounted in the washing machine;  
a first detergent cup in the base to hold and dispense a powder detergent;  
a second detergent cup removably mounted in the first cup to hold and dispense a liquid detergent.
2. The dispenser of claim 1 wherein the second cup is selectively installed in and removed from the first cup by a user of the machine.
3. The dispenser of claim 2 wherein the cups dispense the detergent into the base and the base has a drain for directing the detergent into the tub of the machine.
4. The dispenser of claim 3 further comprising a grate removably installed over the drain.
5. The dispenser of claim 1 further comprising a water inlet to flush detergent from the first and second cups with water.
6. The dispenser of claim 1 wherein the first cup includes an outlet opening for directing detergent into the tub.
7. The dispenser of claim 6 wherein the second cup includes a siphon for directing the liquid detergent into the first cup for passage through the outlet opening and then into the tub.

8. The dispenser of claim 1 wherein the second cup is nested within the first cup.

9. The dispenser of claim 1 wherein the first and second cups each have a floor, with the floor of the second cup being spaced above the floor of the first cup.

10. The dispenser of claim 1 wherein the base has a bottom and the first cup has a floor spaced above the bottom of the base.

11. The dispenser of claim 10 wherein the base has shoulders to support the floor of the first cup in spaced relation to the bottom of the base.

12. The dispenser of claim 1 further comprising a third cup to hold and dispense a fabric softener.

13. The dispenser of claim 12 wherein the third cup is formed integrally with the first cup.

14. The dispenser of claim 12 wherein the third cup includes a siphon to direct the fabric softener to the tub.

15. The dispenser of claim 12 wherein the base has a bottom and the third cup has a floor spaced above the bottom of the base.

16. The dispenser of claim 15 wherein the base includes shoulders to support the third cup above the bottom of the base.

17. The dispenser of claim 1 wherein the first cup is smaller than the base to define an area for adding pre-wash detergent to the base for dispensement into the tub.

18. The dispenser of claim 1 wherein the first cup is removably mounted in the base.

19. The dispenser of claim 1 wherein the first and second cups each have a floor and sidewalls, and the second cup has a lip on the walls to support the second cup on the walls of the first cup.

20. The dispenser of claim 19 wherein the second cup is shallower than the first cup, such that the floor of the second cup is spaced from the floor of the first cup.

21. An improved clothes washing machine having a tub for holding clothes to be washed, the improvement comprising:  
a dispenser having a powder detergent cup and a liquid detergent cup such that a user can choose to use either powder or liquid detergent for a wash cycle of the machine;  
the liquid detergent cup being removably mounted in the powder detergent cup.

22. The improved washing machine of claim 21 wherein the liquid detergent cup is nested within the powder detergent cup.

23. The improved washing machine of claim 21 wherein the dispenser has a portion for receiving a liquid or powder detergent for a prewash cycle of the machine.

24. The improved washing machine of claim 21 wherein the dispenser has a fabric softener cup for adding fabric softener to the tub.

25. The improved washing machine of claim 21 wherein the dispenser includes a drain for directing liquid and powder detergent to the tub.

26. The improved washing machine of claim 21 wherein the powder detergent cup includes an outlet opening and the liquid detergent cup includes a siphon in communication with the outlet opening.

27. The improved washing machine of claim 21 wherein the cups are removable.

28. The improved washing machine of claim 21 wherein the dispenser includes a base, and the powder detergent cup is supported in the base.

29. The improved washing machine of claim 28 wherein the liquid detergent cup empties into the powder cup, which in turn empties into the base, which has a drain communicating with the tub.

30. The improved washing machine of claim 28 wherein the base further defines a prewash detergent compartment.